

WHAT IS CLAIMED IS:

1. A method for improving the ability to read an optical disc during a startup procedure, comprising the steps of:

(a) reading data from the disc;

5 (b) detecting any reading error causing failure of step (a); and

(c) if a reading error causing failure of step (a) is detected, rotating the disc by an angle for minimizing the impact of the errors.

2. The method of claim 1, further comprising the step of:

10 (d) if the reading error is detected, after step (c), reading data from the disc.

3. The method of claim 2, further comprising the step of:

(e) if the reading error is detected, after step (d), repeating steps (c) through (d).

15 4. The method of any one of claims 1 to 3, wherein the angle is preset.

5. The method of any one of claims 1 to 3, further comprising the step of:

20 if the reading error is detected, determining an angle for rotating the disc for minimizing the reading error, and the disc is rotated by the determined angle.

6. The method of claim 5, further comprising the step of:

if the reading error is detected, measuring an eccentricity of the disc with respect to a rotational axis of a system in which the disc is being read,

and the angle is determined based on a minimum eccentricity value measured.

7. A method for improving the ability to read an optical disc during a startup procedure, comprising the steps of:

- 5 (a) reading data from the disc;
- (b) detecting any reading error causing failure of step (a); and
- (c) if a reading error causing failure of step (a) is detected, prompting a user to rotate the disc by an angle for minimizing the impact of the error.

10 8. The method of claim 7, further comprising the step of:

 (d) if the reading error is detected, after step (c) and the user has rotated the disc, reading data from the disc.

9. The method of claim 8, further comprising the step of:

- (e) if the reading error is detected, after step (d), repeating steps
- 15 (c) through (d).

10. The method of any one of claims 1 to 9, wherein the reading error includes at least one of a data error and a servo error.

11. A disc player system with improved capability to read an optical disc, comprising:

20 means for reading data from the disc during a startup procedure;

 means for detecting any reading error causing failure of the startup procedure; and

means for rotating the disc by an angle for minimizing impact on the system due to disc errors, the rotating means rotating the disc if the reading error is detected.

5 12. The system of claim 11, wherein if the reading error is detected and the disc has been rotated, the reading means again reads data from the disc.

13. The system of claim 12, wherein:

10 if the reading error is detected and the disc has been rotated and read again, the detecting means again detects any reading error causing failure of the startup procedure ,

the rotating means again rotates the disc by an angle for minimizing the impact on the system due to disk errors if a reading error is again detected, and

15 the reading means again reads data from the disc if the reading error is again detected.

14. The system of claim 11, wherein the angle is preset.

15. The system of claim 11, further comprising:

20 means for determining an angle for rotating the disc for minimizing impact on the system due to disk errors, the determining means determining the angle if the reading error is detected;

wherein if the reading error is detected, the rotating means rotates the disc by the determined angle.

16. The system of claim 15, further comprising:

25 means for measuring an eccentricity of the disc with respect to a rotational axis of the system, and

wherein if the reading error is detected, the determining means determines the angle based on a minimum eccentricity value measured.

17. A disc player system with improved capability to read an optical disc, comprising:

5 means for reading data from the disc during a startup procedure;

means for detecting any reading error causing failure of the startup procedure; and

10 means for prompting a user to rotate the disc by an angle for minimizing impact on the system due to disk errors, the prompting means prompting the user if the reading error is detected.

18. The system of claim 17, wherein if the reading error is detected and the disc has been rotated, the reading means again reads data from the disc.

19. The system of claim 18, wherein:

15 if the reading error is detected and the disc has been rotated and read again, the detecting means again detects any error causing failure of the startup procedure,

20 the prompting means again prompts the user to rotate the disc by an angle for minimizing the impact of disk errors if a reading error is again detected, and

the reading means again reads data from the disc if the reading error is again detected.

25 20. The system of any one of claims 11 to 19, wherein the reading error includes at least one of a data error and a servo error causing failure of a startup procedure.